

Approximately 80 percent of the City's 3.7 square mile area is designated as residential on the land-use map. Residential land use comprises a large area of the City and residential activities can have a considerable effect on water quality of receiving waters. The City's residential component of the stormwater program aims to reduce pollutant runoff from residential areas and activities to the MEP.

The overall goal of the program is to minimize the impact of discharges from residential areas on receiving waters in Lemon Grove and, where possible, to enhance the quality of these resources. The following sections will describe the program activities conducted during FY 2009-10 that contributed to the successful implementation of the City's Residential Component.

6.1 Source Characterization

The City of Lemon Grove encompasses 3.78 square miles. The City has a population of approximately 26,000 residents. Attachment L-1 contains a demographics chart for the population of Lemon Grove. As Attachment L-1 shows the City expects the population to grow twenty-three percent between 1995 and 2020. As the community grows, the collective impact of residential activities on water quality will increase commensurately. Maintaining an adequate emphasis on residential areas is therefore crucial to the success of the City's water quality programs.

This section identifies the high threat to water quality residential areas and activities that were focused on during FY 2009-10. The high threat to water quality areas and activities within the City were identified during the 2008 JURMP update process and are described in detail in the JURMP. The following section will briefly summarize this process.

6.1.1 High Threat to Water Quality Activities

In consideration of the minimum required high threat to water quality residential activities listed in Section D.3.c(1) of Order 2007-01, the following residential activities were identified as residential activities that hold the greatest threat potential to local receiving water quality:

- ❖ Automobile Repair and Maintenance
- ❖ Automobile Washing
- ❖ Automobile Parking
- ❖ Home Improvement, Garden Care Activities, and Product Use
- ❖ Disposal of Trash, Pet Waste, Green Waste, and Household Hazardous Waste

6.1.2 High Threat to Water Quality Areas

Section D.3.c(1) of Order 2007-01, requires that Copermittees identify all high threat to water quality residential areas. During the 2008 JURMP update, the City identified high threat to water quality residential areas using the following criteria:

- ❖ Any residential areas tributary to a CWS section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired
- ❖ Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within environmentally sensitive areas (as defined in Attachment C of the Permit)

The City has one section 303(d) impaired water body within or directly adjacent to its boundaries. The 303(d) impaired water body within the City is Chollas Creek and is the main watershed for the City. Based on the definition in Attachment C of the Permit, the City does not have any coastal lagoons or environmentally sensitive areas within its boundaries. By collaborating with other copermittees, the City has identified the following pollutants as pollutants of concern for residential areas:

- ❖ Bacteria
- ❖ Nutrients
- ❖ Sediment
- ❖ Pesticides
- ❖ Trash

In consideration of identified 303(d) listed water body and the primary pollutants of concern, City staff has identified the locations of high threat to water quality residential areas as follows:

- ❖ All houses within 500 ft of Chollas Creek, USGS blueline
- ❖ All houses within 500 ft of any major Chollas Creek drainage channels

This primary affects houses along Main St, San Miguel, and Bakersfield at Ensenada.

6.1.3 Evaluation of Oversight of Residential Areas and Activities

The City is planning to conduct a formal evaluation of the methods used for oversight of residential areas and activities during the permit cycle of Order 2007-01. The evaluation will coincide with the City's effectiveness assessment for the Residential Component. Since the methods used for residential oversight were recently updated within this last fiscal year, City staff determined that it would be

most appropriate and most accurate to evaluate the success of these methods in following reporting periods.

6.2 Best Management Practice Requirements

This section describes the updates made to the City's minimum BMPs that were implemented during FY 2009-10. The minimum BMPs for residential high threat to water quality activities were established in the City's 2002 JURMP. As part of the 2008 update, the minimum BMPs were reviewed and updated as necessary.

6.2.1 Pollution Prevention

Pollution prevention is the act of reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream. Pollution prevention methods have been integrated into the minimum BMPs established for high threat to water quality areas and activities.

6.2.2 List of Minimum BMPs

As part of the City's JURMP update, the City designated the following minimum BMPs for high threat to water quality residential activities and areas. The minimum BMPs are primarily nonstructural and area targeted at activities specified in Section 6.2 as having a high threat to water quality. Pollution prevention methods were incorporated into this set of BMPs, where appropriate.

Automobile Repair and Maintenance

Pollution Prevention: a) employ routine preventative maintenance practices, b) reduce vehicle use whenever possible (carpool, use public transportation, bike or walk for short trips, alter driving habits), c) make timely vehicle repairs

Leaks and Spills: prevent leaks and spills from entering the stormdrain by using or doing: drip pans, plastic sheeting, or other containment devices, work indoors or under shelter and never in the rain, immediately clean spills, use dry cleaning methods, establish clean up standards, and require that tools and parts be cleaned in a contained area

Materials and Waste Management: properly manage and dispose of automotive wastes and materials by: draining fluids from automobiles, disposing of wastes and fluids properly and lawfully, store materials, parts and tools indoors or under cover, use secure and watertight containers when storing materials and wastes

Automobile Washing

Management/Reduction of Wash Water: a) whenever possible, use commercial self-serve or full-serve car washes that properly dispose of or recycle the water, b) when washing at a residence be sure to: wash over a porous surface such as grass or dirt when possible, use dry cleaning methods, turn off the water when not in use or use a controllable spray nozzle, encourage the use of a neighborhood wash area where contaminants can be easily managed

Materials and Waste Management: a) properly dispose of soapy water or bucket water to a sanitary sewer or landscaped area, b) use dry methods to degrease or clean especially dirty areas such as tires

Automobile Parking

- a) use routine preventative maintenance practices and make timely vehicle repairs to prevent fluid leaks
- b) design and construct parking areas to minimize stormwater impacts; covered garages should be plumbed to the sanitary sewer

Home and Garden Care Activities and Product Use

Garden and Yard Care

Pollution Prevention: a) use safe substitutes and alternative gardening methods such as IPM techniques, native and drought tolerant plants, use compost or vermiculture for green waste recycling, follow manufacturers instructions for the application of any chemicals, identify pests before treatment, b) read all labels on products, c) implement water conservation, d) consider xeroscape gardens, e) repair and maintain irrigation system to prevent over watering, f) recycle green waste, g) plant or mulch hillsides and slopes to prevent erosion

Leaks and Spills: a) immediately clean any chemical spills, fertilizers, or soil, b) return spilt items to container for future use or proper disposal

Materials and Waste Management: a) store lawn care products in closed labeled containers indoors or covered areas, b) refrain from using chemicals on windy or rainy days, c) cover stockpiles of soil, compost, or fertilizer, d) dispose of chemicals through the HHW program, e) utilize dry sweeping methods for clean up

Restrictions on Activities: a) do not hose off paved surfaces to the street or gutter, b) do not put hazardous waste in the trash, landfill or stormdrain

Home Care and Maintenance

Pollution Prevention: a) utilize smart purchasing practices that reduce waste, b) use less toxic or non-toxic substitutes for cleaning, c) read and follow product labels, d) recycle used or unwanted products, e) use water based paints when possible, f) recycle unwanted appliances and equipment

Leaks and Spills: a) clean up spills immediately, b) properly dispose of waste from clean up materials

Materials and Waste Management: a) store HHW materials in closed labeled containers and in covered areas, b) recycle latex paint through local programs, c) dispose of hazardous products through the HHW program, d) dispose of trash in the proper receptacles with lids

Restrictions: do not dispose of wash waters (carpet cleaning, mop water, paint wash-up, etc.) to the street, gutter or storm drain

Disposal of Pet Waste

Pollution Prevention: spay or neuter pets to reduce feral populations

Waste Management/Disposal: a) clean up after pets when walking them in public places, b) clean up yards or other commonly used areas, c) properly dispose of the waste in the trash or toilet

Pet Management (Dogs and Cats): do not allow pets to run free in residential neighborhoods, whenever possible

6.3 Program Implementation

This section describes the steps that were taken in FY 2009-10 to require and verify the implementation of designated BMPs for residential areas and activities.

6.3.1 Outreach and Training

The City has an education program that is consistent with the Permit and the jurisdictional program. A significant element of this program consists of educating residents about ways in which they can minimize their impact on local waterways and the environment in general. Education of the citizens in Lemon Grove contributes to the implementation of the residential component of the stormwater program. Outreach messages that are relayed to the public include, but are not limited to:

- ❖ Impacts of urban runoff on receiving waters
- ❖ Distinction between the MS4 and the sanitary sewer
- ❖ Pollution prevention and safe alternatives
- ❖ HHW collection and recycling
- ❖ BMP implementation and maintenance
- ❖ Pet and animal waste disposal
- ❖ Equipment and vehicle maintenance and repair
- ❖ Spill response, containment and recovery
- ❖ Water conservation

During FY 2009-10, City staff conveyed these messages to the public through a variety of mechanisms, including:

- ❖ City's Website
- ❖ Production and distribution of brochures and promotional items

- ❖ Public participation in community events
- ❖ Response to residential complaints
- ❖ One on one conversations
- ❖ Public participation events such as clean-ups

Implementation of these mechanisms by the City helps to make the public aware of the types of activities that have the potential to impact water quality and the BMPs that can be implemented to reduce this impact. Awareness is the first step in the process towards behavioral change. A detailed description of the educational activities implemented by the City can be found in Section 8.

6.3.2 Used Oil, E-Waste, and HHW Collection Services

The City facilitates the proper management and disposal of used oil, toxic chemicals, and other household hazardous wastes (HHW) through various mechanisms. The City participates in door to door home collection, a permanent recycling facility is located in the City, and collection events for all HHW and e-waste. In addition, the City encourages weekly curbside garbage, recycling, and yard waste pick-up services through a franchise with EDCO. The various components of the solid waste and hazardous waste collection services provided by or for the City are described in detail below.

HHW Collection Program

The City seeks to reduce solid waste generated in its boundaries. Conservation techniques supported by the City include source reduction, reuse, and recycling, including the procurement of recycled-content products. The City must meet the state-mandated fifty percent reduction level for solid waste disposal, which means at least half of the refuse generated in 1990, adjusted for population and economics, must be spared from a landfill. This information is lengthy and is available upon request.

The City has completed and approved the construction and demolition ordinance. The ordinance went into effect at the beginning of December 2005. Only two demolition sites qualified and completed the program during this reporting period. Both projects were very small private development projects and the City has not calculated the waste totals as of this report. The totals will be available upon request by October 30, 2010.

The recycling outreach efforts include conducting public education, establishing infrastructure, and supporting existing recycling operations. Current programs focus on: revising the City's recycling plans, business recycling, enforcement (business and residential), construction and demolition waste, motor oil recycling and storm drain filters, and public education including schools, brochures, and interaction with City staff.

During this reporting period, the City participated in eight collection events for solid waste disposal. All of the events were in cooperation with a Household Hazardous Waste grant through CIWMB. .

The City held one collection day through EDCO and their facilities at the same time as the curb side clean up day. These events allow residents to dispose of unwanted bulky items and HHW free of charge. The elderly and disabled can schedule for curb-side service with City staff. The event during this reporting period took place on April 24-25. Due to the earlier due date of this report, the City is unable to supply HHW totals for the previous fiscal year. The totals for FY 2009-10, as per the HHW program, are not due to the State regulating agency until October 1, 2010; making the City's finalized data unavailable until mid-October at the earliest. The City is currently cooperating in a different capacity with the management of the local HHW program. The City of La Mesa is now the lead agency for the HHW collection contract through EDCO. EDCO's La Mesa HHW facility is the closest drop-off location to the City of Lemon Grove. The City pays La Mesa a small contract management fee to utilize the EDCO HHW facility and then obtains mass totals from the City of La Mesa. The City is happy to provide the Regional Board with those totals upon request after October 30, 2010.

The City has revamped its e-waste collection program and now contracts with Recycle San Diego to provide local events. During FY 2009-10, the City held eleven e-waste recycle events at the park adjacent to City Hall. At the time of this report, the contractor has not yet compiled the collection data for these events. That data will be available upon request after November 30, 2010.

Used Oil Recycling Program

Statistics from the California Integrated Waste Management Board (CIWMB) indicate that 1 in 5 households in California have a do-it-yourself (DIY) oil changer. "There were 91.3 million gallons of used lubricating oil (ULO) were recycled during 2005, which was 5 percent above the 87.0 million gallons collected in 2004. The ULO recycling rate for 2005 was 59.5 percent, which is a 3 percent increase when compared to ULO recycled in 2004. The lubricating oil recycling rate does not account for oil burned off or spilled during use, which is estimated to range from 20 to 40 percent."¹ Below are four charts that demonstrate this trend in increased recycling.

¹ <http://www.ciwmb.ca.gov/usedoil/RateInfo/default.htm>

Table 6-1 Amount of Lubricating Oil Recycled as a Percentage of Sales, 1994-2005 (Calendar Years)

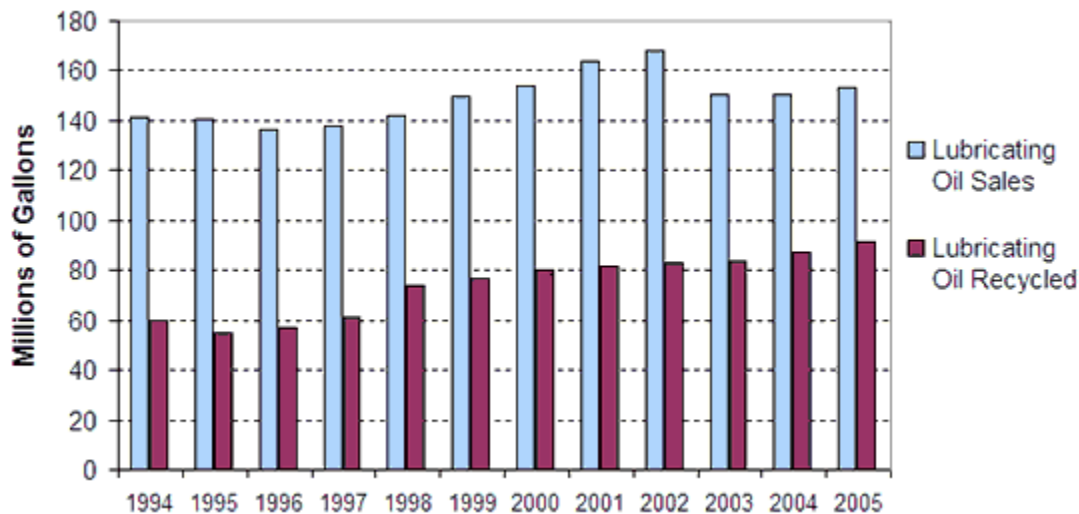


Table 6-2 Annual Oil Sales and Used Oil Recycling Rates (in millions of gallons)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Lubricating Oil Sales	141.2	140.8	136.2	137.5	142.1	150.0	154.3	163.6	168.0	150.2	150.5	153.5
Industrial Oil Sales	78.0	117.3	140.9	141.7	152.4	176.4	155.7	149.1	147.1	135.8	144.6	123.1
Total Oil Sales*	219.2	258.1	277.1	279.5	294.5	326.4	310.0	312.7	315.1	286.0	295.0	276.6
Lubricating Oil Recycled**	59.9	54.6	56.8	60.9	73.6	76.9	80.0	81.9	83.1	83.7	87.0	91.3
Industrial Oil Recycled**	16.7	19.5	20.8	19.3	11.6	10.4	7.9	15.5	17.5	32.4	32.5	31.4
Total Oil Recycled	76.6	74.1	77.6	80.2	85.2	87.3	87.9	97.4	100.6	116.1	119.4	122.7

* The volumes for oil sales and used oil collections are revised as used oil recycling fees are collected or refunded. Sales totals for lubricating oil are subject to change. Fees on oil sales and refunds for exempt lubricating oils may be reported up to one year after the initial sale.

** Figures include used oil collected in California and used oil sent outside of California.

Table 6-3 Oil Collected by Public Collection Programs (in millions of gallons)

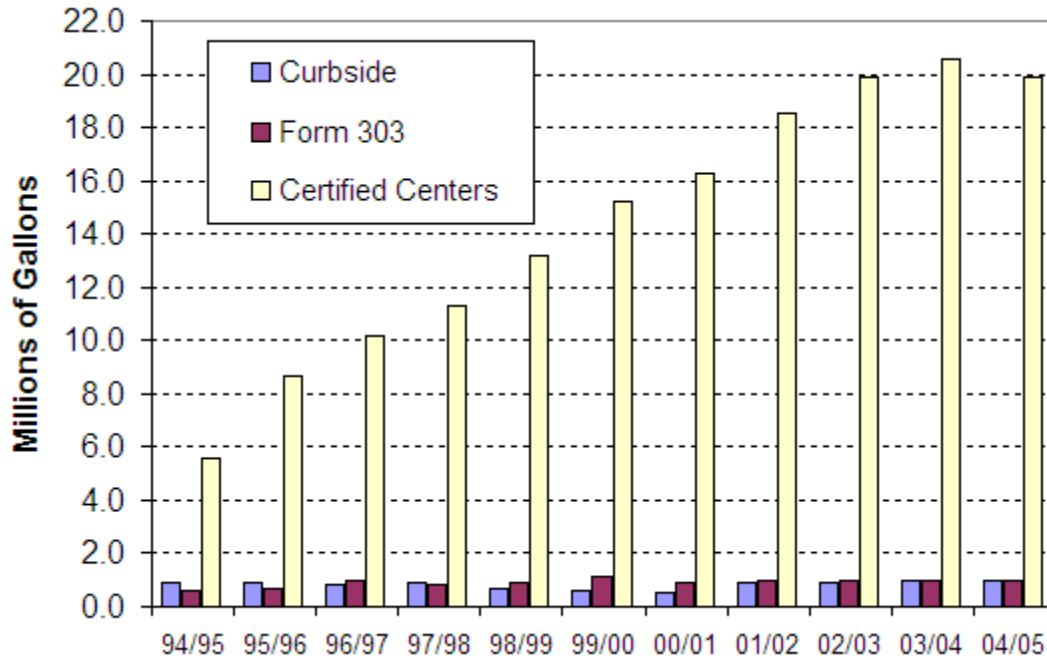


Table 6-4 Oil Collected by Public Collection Programs (in millions of gallons)

	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02*	02/03*	03/04	04/05
Curbside	0.9	0.9	0.8	0.9	0.7	0.6	0.5	0.9	.9	1.0	1.0
Form 303	0.6	0.7	1.0	0.8	0.9	1.1	0.9	1.0	1.0	1.0	1.0
Certified Centers	5.6	8.7	10.2	11.3	13.2	15.2	16.3	18.5	19.9	20.6	19.9
Total Oil	7.1	10.3	12.0	13.0	14.8	16.9	17.7	20.4	21.8	22.6	21.9

The City places a high priority on properly managing the used oil generated by residents within its jurisdiction. Every effort is made to provide residents with convenient drop-off locations and curbside pick-up services, then to promote these services through advertisement and outreach.

The Motor Oil brochure, available at City Hall, contains useful information about how and why to recycle used oil. It also lists the two collection sites and the number for curb-side pick-up. See Attachment L-2 for an example of the brochure. The centers are also listed in each of the City Newsletters that are mailed to the residents bi-annually. See Attachment L-3 for copies of the Newsletter.

The two collection sites are:

- | | |
|----------|-------------------------------------|
| ❖ Kragen | 6925 Federal Blvd (oil and filters) |
| ❖ EDCO | 6670 Federal Blvd (oil only) |

The curb-side service is sponsored by CIWMB. All the resident needs to do is call 1-800-HHW-PKUP (1-800-449-7587) and request a collection.

6.3.3 Complaint Investigations, Violations, Enforcement, Follow-up and Compliance

When a complaint is registered with the stormwater hotline or other form of communication such as e-mail, a County hotline referral, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City staff with enforcement authority within a reasonable time frame. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

The City enforces its stormwater ordinance for all residential areas and activities as necessary to maintain compliance with the Permit and ensure water quality. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for the City to establish appropriate compliance time frames on a case by case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the Code Enforcement data base.

In FY 2009-10, the City received 54 Residential IC/ID complaint calls. Six of those calls were construction related and are discussed in Section 3. Eight of them were related to illegal dumping in the street or gutter. All were abated within 24 hours of notification to the City and all known dischargers were educated on proper disposal methods. No citations or fines were leveled for residential complaints during this reporting period. The remaining calls were either unfounded or not related to stormwater and were delivered to the appropriate department.

6.3.4 Regional Residential Education Program

The City collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan. The Plan contains recommended strategies for the development and implementation of the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale.

This reporting period's collaboration on a regional level was promotion of residential stormwater BMPs at the San Diego County Fair. The Copermittees combined funds to pay for a fair booth, material distribution, signage and advertisements at several locations on the fairgrounds for the duration of the fair. Booth staffers promoted the Think Blue message and presented stormwater educational materials to all fair attendees.